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| APPLICATION NO | FILING DATE | FIRST NAMED INVENTOR | A LIORNEY DOCKET NO. | CONFIRMATION NO | |
|--|-------------|----------------------|------------------------------|-----------------|--|
| 09 684.458 | 10 05 2000 | Mary E. Gerritsen | 10716-4 (P1776R2 and Cura | 2273 | |
| Paul E. Rauch, Ph.D. BRINKS HOFER GILSON & LION P.O. Box 10395 | | | EXAMINER | | |
| | | | NICKOL, GARY B | | |
| Chicago, IL 60610 | | | ART UNIT | PAPER NUMBER | |
| | | | 1642 | 16 | |
| | | | DATE MAILED: 12:18:2001 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|--|---|---|--|------------------------|--|--|--|
| Office Action Summary | | 09/684,458 | GERRITSEN ET | AL. | | | |
| | | Examiner | Art Unit | | | | |
| | | Gary B. Nickol Ph.D. | 1642 | | | | |
| | The MAILING DATE of this communication apports. | | | ddress | | | |
| THE - External control | MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period under the reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | I36(a). In no event, however, may ly within the statutory minimum of will apply and will expire SIX (6) No. a cause the application to become | a reply be timely filed thirty (30) days will be considered tim 10NTHS from the mailing date of this 2 ABANDONED (35 U S C § 133) | ely. communication. | | | |
| Status | Responsive to communication(s) filed on | | | | | | |
| 1) | · | — · nis action is non-final. | | | | | |
| 2a) ☐ | 77110 0000011100 1111011111111111111111 | | matters prosecution as to | the merits is | | | |
| 3) | closed in accordance with the practice under | Ex parte Quayle, 1935 | C.D. 11, 453 O.G. 213. | | | | |
| - | tion of Claims | | | | | | |
| 4) Claim(s) 1-112 is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | | |
| 6)[| • • • | | | | | | |
| | Claim(s) is/are objected to. | | | | | | |
| 8)区 | Claim(s) <u>1-112</u> are subject to restriction and/o | or election requirement. | | | | | |
| Applica | tion Papers | | | | | | |
| | The specification is objected to by the Examin | | | | | | |
| 10) | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11)[| The proposed drawing correction filed on | | _l disapproved by the Exam | niner. | | | |
| | If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) | 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | |
| | under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13)[| Acknowledgment is made of a claim for foreign | gn priority under 35 U.S | .C. § 119(a)-(d) or (f). | | | | |
| á | a) All b) Some * c) None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | |
| | 2. Certified copies of the priority docume | | | | | | |
| | Copies of the certified copies of the pri application from the International E See the attached detailed Office action for a list | Bureau (PCT Rule 17.20 st of the certified copies | a)). not received. | | | | |
| 14) | 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| | a) ☐ The translation of the foreign language p Acknowledgment is made of a claim for dome | provisional application ha | as been received. | | | | |
| Attachm | | , | | | | | |
| 1) No | otice of References Cited (PTO-892) otice of Draftsperson's Patent Drawing Review (PTO-948) formation Disclosure Statement(s) (PTO-1449) Paper No(s | 5) Notic | view Summary (PTO-413) Paper se of Informal Patent Application r: fax sheet. | | | | |
| ~, <u> </u> | | | | | | | |

Art Unit: 1642

DETAILED ACTION

Claims 1-112 are pending in the application and are currently under prosecution.

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is accepting a Fax Response for Written Restriction Requirements. The Fax number is 703-308-4315. A Fax cover sheet is attached to this Office Action for your convenience. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 1-23, drawn to ONE isolated nucleic acid molecule, vector and host cell thereof, and process for producing a polypeptide, classified in class 536, subclass 23.1; class 435, subclasses 320.1, 325, and 69.1.

Upon election of Group 1, applicant must select only ONE nucleic acid molecule of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each nucleic acid molecule represents an independent group, not a species in view that each are separate and distinct molecules with different structures and functions.

Art Unit: 1642

2. Claims 24-35, 60-63, 66-67 drawn to ONE isolated polypeptide and composition thereof and corresponding chimeric thereof, classified in class 530, subclass 300+.

Upon election of Group 2, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

3. Claims 36-39, 60-63, 65-67 drawn to ONE antibody and composition thereof, classified in class 530, subclass 387.1.

Upon election of Group 3, applicant must select only ONE antibody of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antibody represents an independent group, not a species.

4. Claims 40-48, 50-52, 54-57, 65 drawn to ONE antigene compound and pharmaceutical preparation thereof which is an antisense oligonucleotide, classified in class 536, subclass 24.5, class 514, subclass 44.

Art Unit: 1642

Upon election of Group 4, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

5. Claims 40, 49, 54-57 drawn to ONE antigene compound and pharmaceutical preparation thereof which is a peptide nucleic acid, classified in class 536, subclass 24.5.

Upon election of Group 5, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

6. Claims 40, 49, 54-57 drawn to ONE antigene compound and pharmaceutical preparation thereof which is a ribozyme, classified in class 536, subclass 24.5.

Upon election of Group 6, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

Art Unit: 1642

7. Claim 53, drawn to an in-vitro method of inhibiting the expression of ONE gene of claim 35 (either PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45,PRO-C-MG.64, or PRO-C-MG.72) with ONE antigene compound which is an antisense oligonucleotide, classified in class 435, subclass 6.

Upon election of Group 7, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

8. Claim 53, drawn to an in-vitro method of inhibiting the expression of ONE gene of claim 35 (either PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72) with ONE antigene compound which is a peptide nucleic acid, classified in class 435, subclass 6.

Upon election of Group 8, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

Art Unit: 1642

9. Claim 53, drawn to an in-vitro method of inhibiting the expression of ONE gene of claim 35 (either PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45,PRO-C-MG.64, or PRO-C-MG.72) with ONE antigene compound which is a ribozyme, classified in class 435, subclass 6.

Upon election of Group 9, applicant must select only ONE antigene compound targeted to one of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene compound represents an independent group, not a species.

10. Claims 58, 60-61, 64, 66-67 drawn to ONE agonist and composition thereof, classified in class 514, subclass 1.

Upon election of Group 10, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

11. Claims 59-61, 65, 67 drawn to ONE antagonist and composition thereof, classified in class 514, subclass 1.

Art Unit: 1642

Upon election of Group 11, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

12. Claims 68, 71 drawn to an article of manufacture comprising ONE polypeptide classified in class 435, subclass 810.

Upon election of Group 12, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

13. Claims 68-69, 71 drawn to an article of manufacture comprising ONE agonist, classified in class 435, subclass 810.

Upon election of Group 13, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

Art Unit: 1642

14. Claims 68, 70-71 drawn to an article of manufacture comprising ONE antagonist classified in class 435, subclass 810.

Upon election of Group 14, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

15. Claims 72-73 drawn to a method for identifying an agonist of ONE polypeptide classified in class 435, subclass 4.

Upon election of Group 15, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

16. Claim 74 drawn to a method for identifying a compound that inhibits the biological activity of ONE polypeptide. classified in class 435, subclass 4.

Art Unit: 1642

Upon election of Group 16, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

17. Claims 75-77 drawn to a method for identifying a compound that inhibits the expression of ONE polypeptide. classified in class 435, subclass 6.

Upon election of Group 17, applicant must select only ONE gene expression of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each expression represents an independent group, not a species.

18. Claim 78 drawn to a method for diagnosing a disease which is related to a mutation in ONE polypeptide-encoding nucleic acid sequence, classified in class 435, subclass 6.

Upon election of Group 18, applicant must select only ONE nucleic acid of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each expression represents an independent group, not a species.

19. Claim 79 drawn to a method for diagnosing a cardiovascular disorder comprising analyzing the level of expression of ONE gene. classified in class 435, subclass 6.

Art Unit: 1642

Upon election of Group 19, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

20. Claim 79 drawn to a method for diagnosing an endothelial or angiogenic disorder comprising analyzing the level of expression of ONE gene. classified in class 435, subclass 6.

Upon election of Group 20, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

Claims 80-82 drawn to a method for diagnosing a cardiovascular disorder comprising detecting the presence or absence of ONE polypeptide, classified in class 435, subclass7.1.

Upon election of Group 21, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

Art Unit: 1642

Claims 80-82 drawn to a method for diagnosing an endothelial or angiogenic disorder comprising detecting the presence or absence of ONE polypeptide. classified in class 435, subclass 7.1.

Upon election of Group 22, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

23. Claims 83-84 drawn to a cardiovascular disorder diagnostic kit comprising ONE antibody classified in class 435, subclass 810.

Upon election of Group 23, applicant must select only ONE antibody of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antibody represents an independent group, not a species.

24. Claims 83-84 drawn to a cardiovascular disorder diagnostic kit comprising ONE antigene classified in class 435, subclass 810.

Art Unit: 1642

Upon election of Group 24, applicant must select only ONE antigene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene represents an independent group, not a species.

25. Claims 83-84 drawn to an endothelial or angiogenic disorder diagnostic kit comprising ONE antibody classified in class 435, subclass 810.

Upon election of Group 25, applicant must select only ONE antibody of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antibody represents an independent group, not a species.

26. Claims 83-84 drawn to an endothelial or angiogenic disorder diagnostic kit comprising ONE antigene classified in class 435, subclass 810.

Upon election of Group 26, applicant must select only ONE antigene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antigene represents an independent group, not a species.

Art Unit: 1642

27. Claims 85-88 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE polypeptide wherein said disorder is a vascular trauma, classified in class 424, subclass 184.1.

Upon election of Group 27, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

28. Claims 85-88 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE polypeptide wherein said disorder is cancer, classified in class 424, subclass 184.1; class 436, subclass 64.

Upon election of Group 28, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

29. Claims 85-89 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE agonist wherein said disorder is a vascular trauma, classified in class 514, subclass 1.

Art Unit: 1642

Upon election of Group 29, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

30. Claims 85-89 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE agonist wherein said disorder is cancer, classified in class 514, subclass 1; class 436, subclass 64.

Upon election of Group 30, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

31. Claims 85-88, 90 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE antagonist wherein said disorder is a vascular trauma, classified in class 514, subclass 1.

Upon election of Group 31, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

Art Unit: 1642

Claims 85-88. 90 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE antagonist wherein said disorder is cancer, classified in class 514, subclass 1; class 436, subclass 64.

Upon election of Group 32, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

33. Claims 85-88 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE polypeptide wherein said disorder is a vascular trauma, classified in class 424, subclass 184.1.

Upon election of Group 33, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

Art Unit: 1642

34. Claims 85-89 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE agonist wherein said disorder is a vascular trauma, classified in class 514, subclass 1.

Upon election of Group 34, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

Claims 85-88, 90 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE antagonist wherein said disorder is a vascular trauma, classified in class 424, subclass 130.1.

Upon election of Group 35, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

36. Claims 85-88 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE polypeptide wherein said disorder is cancer, classified in class 424, subclass 184.1; class 436, subclass 64.

Art Unit: 1642

Upon election of Group 36, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

37. Claims 85-89 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE agonist wherein said disorder is cancer, classified in class 424, subclass 184.1; class 436, subclass 64.

Upon election of Group 37, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

38. Claims 85-88, 90 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE antagonist wherein said disorder is cancer, classified in class 424, subclass 184.1; class 436, subclass 64.

Art Unit: 1642

Upon election of Group 38, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

39. Claims 91, 94-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE gene-encoding polypeptide wherein said disorder is vascular trauma, classified in class 514, subclass 44.

Upon election of Group 39, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

40. Claims 91, 94-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE gene-encoding polypeptide wherein said disorder is cancer, classified in class 514, subclass 44; class 435, subclass 64.

Art Unit: 1642

Upon election of Group 40, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

41. Claims 91-92, 94-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding agonist wherein said disorder is vascular trauma, classified in class 514, subclass 44.

Upon election of Group 41, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

42. Claims 91-92, 94-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding agonist wherein said disorder is cancer, classified in class 514, subclass 44; class 435, subclass 64.

Art Unit: 1642

Upon election of Group 42, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

Claims 91, 93-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE gene-encoding antagonist wherein said disorder is vascular trauma, classified in class 514, subclass 44.

Upon election of Group 43, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

Claims 91, 93-95 drawn to a method of treating a cardiovascular disorder in a mammal comprising administering a therapeutically effective amount of ONE gene-encoding antagonist wherein said disorder is cancer, classified in class 514, subclass 44; class 435, subclass 64.

Upon election of Group 44, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.



Art Unit: 1642

45. Claims 91, 94-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding polypeptide wherein said disorder is vascular trauma, classified in class 514, subclass 44.

Upon election of Group 45, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

46. Claims 91, 94-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding polypeptide wherein said disorder is cancer, classified in class 514, subclass 44; class 435, subclass 64.

Upon election of Group 46, applicant must select only ONE gene of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each gene represents an independent group, not a species.

47. Claims 91-92, 94-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE gene-

Art Unit: 1642

encoding agonist wherein said disorder is vascular trauma, classified in class 514, subclass 44.

Upon election of Group 47, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

48. Claims 91-92, 94-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding agonist wherein said disorder is cancer, classified in class 514, subclass 44: class 435, subclass 64.

Upon election of Group 48, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

Claims 91, 93-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding antagonist wherein said disorder is vascular trauma, classified in class 514.

Art Unit: 1642

Upon election of Group 49, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

50. Claims 91, 93-95 drawn to a method of treating an endothelial or angiogenic disorder in a mammal comprising administering a therapeutically effective amount of ONE geneencoding antagonist wherein said disorder is cancer, classified in class 514, subclass 44; class 436, subclass 64.

Upon election of Group 50, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

51. Claims 96-97 drawn to a recombinant retroviral particle comprising a retroviral vector consisting essentially of a promoter, nucleic acid encoding ONE polypeptide and ex-vivo producer cell thereof, classified in class 435, subclass 320.1, 325.

Art Unit: 1642

Upon election of Group 51, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

52. Claims 96-97 drawn to a recombinant retroviral particle comprising a retroviral vector consisting essentially of a promoter, nucleic acid encoding ONE agonist polypeptide and ex-vivo producer cell thereof, classified in class 435, subclass 320.1, 325.

Upon election of Group 52, applicant must select only ONE agonist polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist polypeptide represents an independent group, not a species.

53. Claims 96-97 drawn to a recombinant retroviral particle comprising a retroviral vector consisting essentially of a promoter, nucleic acid encoding ONE antagonist polypeptide and ex-vivo producer cell thereof, classified in class 435, subclass 320.1, 325.

Upon election of Group 53, applicant must select only ONE antagonist polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

Art Unit: 1642

Claims 98, 100, and 102, drawn to a method for inhibiting endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE polypeptide, classified in class 424, subclass 184.1.

Upon election of Group 54, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

Claims 98, 100, and 102, drawn to a method for inhibiting endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE agonist, classified in class 424, subclass 184.1.

Upon election of Group 55, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

56. Claims 98, 100, and 102, drawn to a method for inhibiting endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE antagonist, classified in class 424, subclass 184.1.

Art Unit: 1642

Upon election of Group 56, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

57. Claim 98 drawn to a method for inhibiting endothelial cell growth in a mammal comprising administering ONE antibody, classified in class 424, subclass 130.1.

Upon election of Group 57, applicant must select only ONE antibody of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antibody represents an independent group, not a species.

58. Claims 99, 101, 103 drawn to a method for simulating endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE polypeptide, classified in class 424, subclass 184.1.

Upon election of Group 58, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.



Art Unit: 1642

59. Claims 99, 101, 103 drawn to a method for stimulating endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE agonist, classified in class 424, subclass 184.1.

Upon election of Group 59, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

60. Claims 99, 101, and 103, drawn to a method for stimulating endothelial cell growth, angiogenesis, and endothelial tube formation comprising administering ONE antagonist, classified in class 424, subclass 184.1.

Upon election of Group 60, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

61. Claim 99 drawn to a method for stimulating endothelial cell growth in a mammal comprising administering ONE antibody, classified in class 424, subclass 130.1.

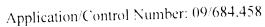
Art Unit: 1642

Upon election of Group 61, applicant must select only ONE antibody of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antibody represents an independent group, not a species.

62. Claim 104 drawn to a method for treating a tumor, reducing the size of a tumor, reducing the vasculature supporting a tumor, or reducing the tumor burden of a mammal comprising administering ONE polypeptide, classified in class 424, subclass 184.1; class 435, subclass 436.

Upon election of Group 62, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

63. Claim 104 drawn to a method for treating a tumor, reducing the size of a tumor, reducing the vasculature supporting a tumor, or reducing the tumor burden of a mammal comprising administering ONE agonist, classified in class 424, subclass 184.1; class 435, subclass 436.



Art Unit: 1642

Upon election of Group 63, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

64. Claim 104 drawn to a method for treating a tumor, reducing the size of a tumor, reducing the vasculature supporting a tumor, or reducing the tumor burden of a mammal comprising administering ONE antagonist, classified in class 424, subclass 184.1; class 435, subclass 436.

Upon election of Group 64, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

65. Claims 105-106 drawn to a method for treating a disease characterized by undesirable excessive neovascularization comprising administering ONE polypeptide, classified in class 424, subclass 184.1.

Art Unit: 1642

Upon election of Group 65, applicant must select only ONE polypeptide of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each polypeptide represents an independent group, not a species.

66. Claims 105-106 drawn to a method for treating a disease characterized by undesirable excessive neovascularization comprising administering ONE agonist, classified in class 424, subclass 184.1.

Upon election of Group 66, applicant must select only ONE agonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each agonist represents an independent group, not a species.

67. Claims 105-106 drawn to a method for treating a disease characterized by undesirable excessive neovascularization comprising administering ONE antagonist, classified in class 424, subclass 184.1.

Upon election of Group 67, applicant must select only ONE antagonist of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each antagonist represents an independent group, not a species.

Art Unit: 1642

68. Claims 107-112 drawn to a microarray comprising a solid support and a plurality of different oligonucleotides attached to the support wherein at least ONE of the different oligonucleotides codes for ONE sequence, classified in class 436, subclass 518; class 435, subclass 6.

Upon election of Group 68, applicant must select only ONE sequence of the following: PRO-C-MG.2, PRO-C-MG.12, PRO-C-MG.45, PRO-C-MG.64, or PRO-C-MG.72 for examination on the merits as each sequence represents an independent group, not a species.

The inventions are distinct, each from the other because of the following reasons:

The Inventions of Groups 1-6, 10-14, 23-26, 51-53, and 68 represent separate and distinct products which are made by materially different methods, and are used in materially different methods which have different modes of operation, different functions and different effects.

The inventions of Groups 7-9, 15-22, 27-50, and 54-67 are materially distinct methods which differ at least in objectives, method steps, reagents and/or dosages and/or schedules used, response variables, and criteria for success.

The invention of Groups 4-6 and the methods of Groups 7-9 are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another

Art Unit: 1642

materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § **806.05(h)**]. In the instant case, each distinct method can be practiced with either of the materially different products as claimed.

The invention of Group 2 and the methods of Groups 27-28,33,36.54,58.62, and 65 are related as product and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § **806.05(h)**]. In the instant case, the process for using the product as claimed can be practiced with another materially different product such as with an antibody.

The invention of Groups 3-6, 10-14 and the methods of Groups 29-32, 34-35, 37-38, 55-57, 59-61, 63-64, 66-67 are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § **806.05(h)**]. In the instant case, each distinct method can be practiced with either of the materially different products as claimed.

The invention of Groups 51-53 and the methods of Groups 39-50 are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following

Art Unit: 1642

can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see MPEP § 806.05(h)]. In the instant case, each distinct method can be practiced with either of the materially different products as claimed.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Furthermore, because these inventions are distinct for the reasons given above and the search required for one group is not required for another group, restriction for examination purposes as indicated is proper. Finally, in those instances in which more than one Group reads on the claim pending, the claims will only be examined to the extent they read on the elected invention.

Species Election:

Claims 33-35 are generic to a plurality of disclosed patentably distinct species comprising the following:

- 1) epitope tag
- 2) secretion signal
- 3) Fe region

Claims 42, 44, 46, and 48 are generic to a plurality of disclosed patentably distinct species comprising the following:

| Application/Control Number: 09/684,458 Art Unit: 1642 | Page |
|--|--------|
| a) modified internucleoside linkage | |
| b) modified sugar moiety | |
| e) modified nucleobase | |
| d) chimeric oligonucleotide | |
| | |
| Claims 62, 66, and 87 are generic to a plurality of disclosed patentably distinct species | |
| comprising the following agents: | |
| a) cardiovascular | |
| b) endothelial | |
| c) angiogenic | |
| d) angiostatic | |
| | |
| Claims 65, 89, 90, 92-93 are generic to a plurality of disclosed patentably distinct species | es |
| comprising the following molecules: | |
| a) antisense | |
| b) antibody | |
| | |
| Claims 76-77 are generic to a plurality of disclosed patentably distinct species comprisi | ng the |
| following compounds: | |
| a) antigene | |
| b) antisense oligonucleotide | |

Art Unit: 1642

Claim 88 is generic to a plurality of disclosed patentably distinct species comprising the

following agents:

a) chemotherapeutic agent

b) growth inhibitory agent

c) cytotoxic agent

d) angiostatic agent

Claim 106 is generic to a plurality of disclosed patentably distinct species comprising the distinct

diseases or disorders as listed in Claim 106 which differ at least in etiology, pathology, and

mechanisms.. Applicant is required to elect ONE species from Claim 106.

Claims 107-108 are generic to a plurality of disclosed patentably distinct species comprising the

following:

a) at least 6 nucleotides in length

b) 5 to about 60 nucleotides in length

The products of the above species represent separate and distinct molecules with different

structures and functions such that one species could not be interchanged with the other. As such,

each species would require different searches and the consideration of different patentability

issues.

Art Unit: 1642

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1642

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary B. Nickol Ph.D. whose telephone number is 703-305-7143. The examiner can normally be reached on M-F, 8:30-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Gary B. Nickol, Ph.D. Examiner
Art Unit 1642

GBN December 14, 2001 and I

Art Unit: 1642